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Standard Insurance Table Data Migration Specifications

Prepared for
The Office of the Under Secretary of Defense
Personnel and Readiness
And
The Defense Manpower Data Center

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Developer's Representative Signature	Date
Acquirer's Signature	Date

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1. Scope

1.1. Purpose

This document defines the data migration specifications for the Standard Insurance Table (SIT) portion of the redesigned Defense Enrollment Eligibility Reporting System (DEERS), Version 3.0.

1.2. Overview

1.2.1. System Overview

The primary mission of the existing DEERS is to reduce the fraud and abuse of the Department of Defense (DoD) benefits while ensuring that beneficiaries receive the benefits they are entitled. Through various systems that interface with DEERS, users access medical, dental, and insurance information. Each system performs distinct tasks; however, all query the DEERS database for information pertaining to the benefits determination for active duty and retired members of the Army, Navy, Marine Corps, and Air Force, their family members, and their survivors. In addition, legislative actions authorize the provision of health care to DoD, United States Coast Guard (USCG), United States Public Health Service (USPHS), and National Oceanic and Atmospheric Administration (NOAA) personnel. This broad system of reciprocal health care delivery is referred to as the Military Health System (MHS).

Currently, DEERS interacts with the following entities within the MHS community:

- Composite Health Care System (CHCS)
- Managed Care Support Contractors (MCSCs)/Claims Processors
- Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) Fiscal Intermediaries (FIs)
- Designated providers, formerly known as Uniformed Service Treatment Facilities (USTFs), now referred to as Uniformed Services Family Health Plan providers (USFHPs)
- Health Benefits Advisors and other users throughout the continental United States (CONUS) and outside of the continental United States (OCONUS) via the Government Inquiry of DEERS (GIQD) application
- Base Realignment and Closure (BRAC) Pharmacy benefit program contractors
- Continued Health Care Benefit Program (CHCBP) administrator
- DoD Mail Order Pharmacy benefit program contractor

DEERS users also include the Defense Manpower Data Center (DMDC) Support Office (DSO) Telephone Center, the Armed Forces Institute of Pathology (AFIP), and other approved users.

The goal of DEERS is to migrate some of the functionality within the existing DEERS to a new DEERS data model, supporting the MHS Health Functional Architecture as well as additional functional requirements.

The new data model is focused on the concept of "a Person." Under the existing DEERS, data on family members is keyed to and retrieved via the sponsor's Social Security Number (SSN). The new data model will store and retrieve this information via each individual beneficiary's SSN, while defining the beneficiary's relationship to the sponsor in separate data fields. Each beneficiary is therefore regarded as an individual person rather than as a sponsor or, in effect, an attachment to a sponsor.

DEERS is being redesigned as an integrated system consisting of a database; rules for benefits and entitlements eligibility determination and data reconciliation; a set of functional applications; and interfaces to other systems, as required. The database is an Oracle Relational Database Management System (RDBMS). An expert system, AionDS, will be used to code and store the DEERS business rules.

The redesigned and expanded DEERS will continue to be the MHS central source for personnel information from the DoD personnel community. In addition, DEERS will continue to be the source for determining DoD medical benefits.

Using the new system, DEERS will support current functionality as well as the new requirements requested by the MHS community. The functionality supported can be divided into these major categories:

- Maintain Health Care Delivery Program (HCDP) information
- Claims processing or maintain fiscal year and enrollment year catastrophic cap and deductible (CC&D)
- Eligibility verification
- Maintain Non-availability Statements (NAS)
- Maintain Person information
- Maintain specified Immunization information
- Maintain SIT information
- Maintain Other Health Insurance (OHI) information
- Provide reports

DEERS will interface with the MHS community through two primary sources: Electronic Data Interchange (EDI) transactions and a DEERS client application. Systems external to the MHS that request information from DEERS will be required to communicate via EDI message structures. DEERS will also provide a client application containing the functionality required to support the non-EDI MHS community.

1.2.2. Data Conversion Overview

□ The SIT

Data conversion provides the means to transfer data from an existing environment to a new environment. DEERS 3.0 assimilates vast quantities of data from previously isolated entities and encapsulates it; thereby providing true portability of health care. The movement to this new data model will require consolidation of data from multiple sources: DEERS old eligibility, DEERS 2.0, CHCS, the MCSCs, TRICARE Management Activity (TMA)-Aurora, and Birch & Davis Associates (B&D). These entities hold the following data to be converted.

•	DEERS 2.0:
	□ Person
	Personnel
	Benefits
•	DEERS old eligibility:
	□ Current alternate (alt-) care
	□ Alt-care history
	□ NAS
•	CHCS:
	□ OHI
	□ Primary Care Manager (PCM) selection, including PCM Identifiers
•	MCSCs:
	□ Enrollment
	□ Fee Payment
	□ Prime CC&D
•	TMA-Aurora:
	□ Central Deductible and Catastrophic Cap file (CDCF) for Standard fiscal year CC&D
•	B&D∙

With all of these entities working in tandem, much coordination and attention to logistics is required to successfully migrate to DEERS 3.0. This document addresses the detailed specifications for reconciling and migrating the SIT into DEERS 3.0. Other specification documents will cover the remaining areas of the migration.

Given the complexity of the task, it is assumed that the migration to DEERS 3.0 will require multiple iterations of conversion program prototypes during each stage of testing. This is typical for data conversion – repeated cycles of producing export files, reconciling and converting the data, diagnosing errors, generating an error file, researching exceptions, and cleaning up the data. As these iterations progress, changes may need to be made to program logic to respond to

knowledge gained in the detailed analysis of the results. TMA-Aurora, B&D, and the MCSCs will be responsible for supporting this process by providing test files and assisting error research.

Within each iteration, the migration task can be broken down into the following phases:

- Export Phase
- Reconciliation Phase
- Conversion Phase
- Import Phase

These phases will be duplicated for each of the following data entities:

- HCDP
- NAS
- CC&D
 - □ Standard
 - □ Prime

The SIT migration will contain all of the above steps except for the Conversion Phase.

1.2.2.1. Export Phase

The Export Phase involves the export of existing data to sequential files. The format of these sequential files will be defined by DEERS and are documented in this and the remaining data conversion specification documents. These export files contain the data to be converted, though at this point still in its old format. Since the export files serve as inputs to the conversion process, they will hereafter be referred to as input files.

1.2.2.2. Reconciliation Phase

Each input file will be examined to ensure data validity. This is the first step in the Reconciliation Phase. If necessary, a master key file will then be used to associate each record with the appropriate DEERS 3.0 keys, so that the information can be targeted to the correct record on the DEERS 3.0 database. In addition, the Reconciliation Phase may also involve the merging of multiple data sources, such as in the HCDP conversion, where DEERS old eligibility alt-care data and the MCSCs' enrollment data are reconciled with the assigned HCDP data.

1.2.2.3. Conversion Phase

In the Conversion Phase, existing data will be mapped field-by-field to the table formats of the new database. Each data element will be evaluated to determine its place in the new system. This may require a conversion, or may be a direct move. Some conversions will entail translating an existing valid value to new valid value. Others will involve combining current fields into one new field, or splitting one current field into several new fields.

The conversion programs will take the sequential files generated in the Reconciliation Phase, perform any necessary conversions, and migrate the data to sequential load files that replicate, in form, the relevant Oracle tables in DEERS 3.0. In addition to creating the import files, the conversion/migration programs will generate both error files and statistical reports that will be used in researching any problems that arise with the data.

1.2.2.4. Import Phase

The Import Phase involves loading the sequential load files into the Oracle tables in DEERS 3.0. After loading, the data will be validated using SQL scripts.

1.2.3. Standard Insurance Table Overview

The SIT supports the MHS billing and collection process. The DoD is the secondary payer for all claims. Therefore, if a beneficiary has a health insurance policy in addition to their DoD policy, MHS attempts to get reimbursed from the beneficiary's third-party insurance company. The SIT contains all of the third-party insurance company information needed for reimbursement.

The SIT will be maintained in DEERS 3.0 by the verifying source established by the UBO. The MHS personnel will use the SIT to obtain other payer information in a standardized format. The Health Insurance Carrier Identifier will be the key used for managing an insurance carrier. These identifiers will be assigned to insurance carriers by the DoD and stored in the SIT in DEERS. MHS personnel cannot add an OHI policy to a person or patient without a Health Insurance Carrier Identifier that matches an entry in the SIT. When an attempt is made to add an OHI policy containing an insurance carrier not on the SIT, DEERS will provide a temporary ID for the insurance carrier. A SIT update will post the updated insurer information pending validation by the DoD SIT validation agency. The DoD SIT validation agency may also make direct updates to the SIT, without a request to add an OHI policy.

All systems identified as business or trading partners will be notified when the initial SIT is available for download from the World Wide Web (WWW) to their local systems. In the transition period to DEERS 3.0, identified systems will access and update the SIT using a WWW-based application. When the transition period is over, these systems will interact with the SIT directly via DEERS 3.0.

The SIT is still under design review. Changes to the SIT may result in alterations to the design strategy. This in turn may affect the SIT migration and, therefore, this document would need to be updated accordingly.

1.2.4. Standard Insurance Table Data Migration Overview

B&D currently maintains the SIT in a Microsoft Excel file. The SIT data migration will transfer the SIT from its current format into its new format in DEERS 3.0.

1.2.4.1. Export Phase

B&D will provide DEERS with the SIT in a Microsoft Excel file. This file will be transferred from B&D's system to the UNIX machine to be migrated to the mainframe.

1.2.4.2. Reconciliation Phase

In the Reconciliation Phase, each record from the input file is validated. If the data in the record is valid, then it will be loaded into DEERS 3.0.

1.2.4.3. Conversion Phase

No Conversion Phase is necessary for the SIT data migration.

1.2.4.4. Import Phase

After being validated in the Reconciliation Phase, the SIT Input file will be loaded into the Oracle database on the mainframe, specifically into the SIT for which it will be formatted. After loading the table, the data will be validated using SQL scripts.

1.2.5. Objective

The objective of this task is to successfully receive the SIT file from B&D, validate the data, and load it into the DEERS 3.0 database.

2. Referenced Documents

"DEERS/Medical Interface Operational Description Version 13," dated March 19, 1999.

"DEERS/Medical System/Subsystem Requirements Specification," dated September 1998.

"Defense Enrollment Eligibility Reporting System Data Dictionary," dated May 5, 1999. (This is the DEERS 3.0 Data Dictionary.)

Defense Enrollment Eligibility Report System Data Dictionary," dated September 1994. (This is the DEERS old eligibility Data Dictionary.)

DEERS Data Model, "Benefits View of the E2R2 Database, Version 13," dated April 29, 1999.

DEERS Data Model, "Benefits Satellite Database, Version 13," dated April 29, 1999.

3. Data Source

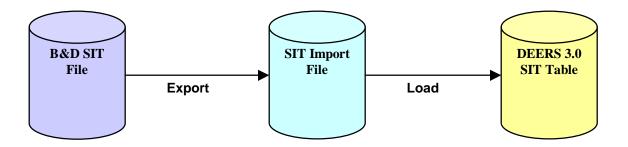
The SIT Input file will be compiled by B&D. B&D will provide DEERS with this file in the format specified in Appendix 8.2.1.

4. Data Target

The SIT Load file will be created on the UNIX machine and populated during the Reconciliation Phase of the conversion. When the Reconciliation Phase is complete, this file will be uploaded to the mainframe at the Auburn Hills Systems Management Center (AHSMC), where it will be imported into the SIT in DEERS 3.0. The file layout for the SIT Load file is shown in Appendix 8.2.2. The SIT Load file will include all of the fields required to add a record to the SIT. When the conversion to DEERS 3.0 is complete, this file will be available to CHCS and the MCSCs via the mainframe at AHSMC.

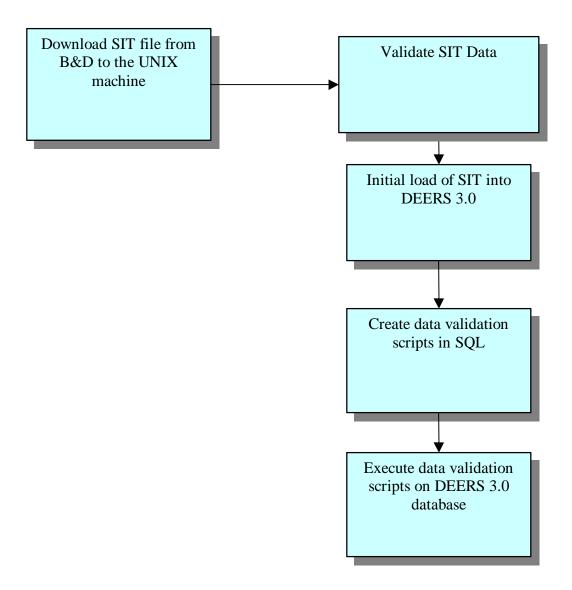
5. Data Flows and Events

The following diagram details, at a high level, the data flows and events that will occur in the SIT data migration.



6. Process Flows

The following diagram details, at a high level, the process flow that will occur in the SIT data migration.



7. Conversion Procedures

7.1. Export Phase

B&D will create the SIT Input file as a Microsoft Excel spreadsheet and it will be downloaded to the UNIX machine. Once on the UNIX machine, the file will be exported into a sequential flat file for processing.

7.2. Reconciliation Phase

7.2.1. Inputs

• SIT Input File

7.2.2. Process

- Read a SIT record.
- Validate each field in the record.
- If any of the data is invalid, write the record to the SIT Error file (SITERR) with the appropriate error code.
- Continue until all records in the file have been processed.

7.2.3. Outputs

- Write all valid SIT records to the SIT Load file (SIT).
- Write any error records to the SIT Error file (SITERR).

7.3. Conversion Phase

No Conversion Phase is necessary for the SIT data migration. The input file is required to be in the load format specified in Appendix 8.2.1.

7.4. Import Phase

- Upload SIT Load file to the mainframe at the AHSMC.
- Load the file into the DEERS 3.0 SIT.
- Validate data in the table using SQL validation scripts.

8. Appendices

8.1. Acronyms

AFIP Armed Forces Institute of Pathology
AHSMC Auburn Hills System Management Center

B&D Birch and Davis Associates, Inc.

BRAC Base Realignment and Closure

CC&D Catastrophic Cap and Deductible

CDCF Central Deductible and Catastrophic Cap file

CHAMPUS Civilian Health and Medical Program of the Uniformed Services

CHCBP Continued Health Care Benefit Program

CHCS Composite Health Care System
CONUS Continental United States

DEERS Defense Enrollment Eligibility Reporting System

DMDC Defense Manpower Data Center
DMIS Defense Military Information System

DoD Department of Defense

DSO Support Office

EDI Electronic Data Interchange

EDS Electronic Data Systems Corporation

FI Fiscal Intermediary

GIQD Government Inquiry of DEERS
HCDP Health Care Delivery Program
MCSC Managed Care Support Contractor

MHS Military Health System
NAS Non-availability Statements

NOAA National Oceanic and Atmospheric Administration

OASH(HA) Office of the Assistant Secretary of Defense, Health Affairs

OCONUS Outside of the Continental United States

OHI Other Health Insurance PCM Primary Care Manager

PGBA Palmetto Government Benefits Administrators RDBMS Relational Database Management System

RM Resources Management
SIT Standard Insurance Table
SQL Structured Query Language
TMA TRICARE Management Activity

UBO Uniform Business Office
USCG United States Coast Guard

USFHP Uniformed Services Family Health Plan
USPHS United States Public Health Service
USTF Uniformed Service Treatment Facility

VSAM Virtual Storage Access Method WPS Wisconsin Physicians Service

8.2. File Layouts

8.2.1. Standard Insurance Table Input File

The SIT Input file is required to be in the same format as that of the SIT Load file, as detailed below. It will be in a Microsoft Excel file.

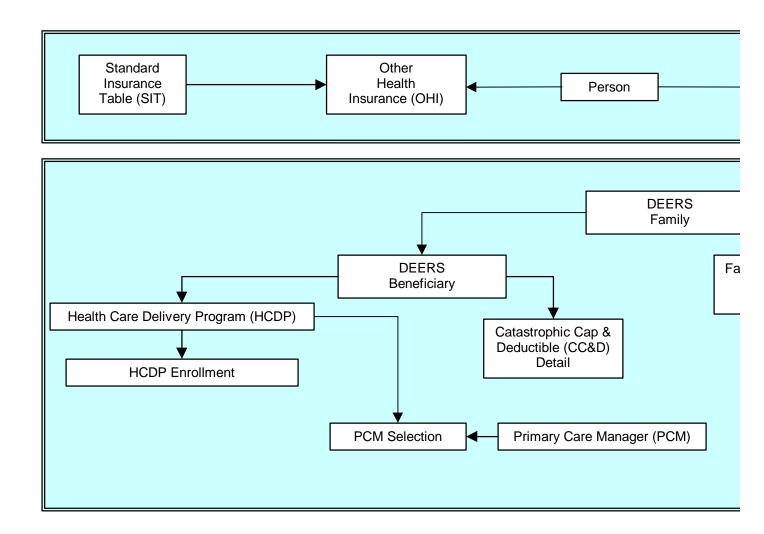
8.2.2. Standard Insurance Table Load File Layout

		Data	Field
Attribute Name	Field Name	Type	Length
Health Insurance Carrier Identifier	HIC_ID	CHAR	9
Health Insurance Carrier Identifier Type Code	HIC_ID_TYP_CD	CHAR	1
Health Insurance Carrier Name	HIC_NM	CHAR	40
Health Insurance Carrier Deactivation Calendar Date	HIC_DAC_DT	DATE	8
Health Insurance Carrier Verification Status Code	HIC_VER_STAT_CD	CHAR	1
Health Insurance Carrier Verification Calendar Date/Time	HIC_VER_STAT_DT	DATE /	14
		TIME	
Health Insurance Carrier Verification System Identifier	HIC_VER_SYS_ID	NUM	7
Health Insurance Carrier Standard Comment Text	HIC_STD_CMT_TX	CHAR	60
Health Insurance Carrier Mailing Address Line 1 Text	HIC_MA_LN1_TX	CHAR	40
Health Insurance Carrier Mailing Address Line 2 Text	HIC_MA_LN2_TX	CHAR	40
Health Insurance Carrier Qualifier Text	HIC_QUAL_TX	CHAR	50
Health Insurance Carrier Mailing Address City Name	HIC_MA_CTY_NM	CHAR	20
Health Insurance Carrier Mailing Address State Code	HIC_MA_ST_CD	CHAR	2
Health Insurance Carrier Mailing Address Postal Region ZIP Code	HIC_MA_PR_ZIP_CD	NUM	5
Health Insurance Carrier Mailing Address Postal Region ZIP	HIC_MA_PR_ZIPX_CD	NUM	4
Extension Code			
Health Insurance Carrier Mailing Address Country Code	HIC_MA_CTY_CD	CHAR	2
Health Insurance Carrier Telephone Number 1 Code	HIC_TNUM1_CD	NUM	14
Health Insurance Carrier Telephone Number 2 Code	HIC_TNUM2_CD	NUM	14
Health Insurance Carrier Fax Number Code	HIC_FAX_CD	NUM	14
Health Insurance Carrier Local Comment Text	HIC_LCL_CMT_TX	CHAR	40
Last Update Calendar Date	LST_UPD_DT	DATE	8
Electronic Date Interchange (EDI) Batch Indicator Code	EDI_BIND_CD		
Health Insurance Carrier EDI Batch Indicator Comment Text	HIC_EDI_BIND_CMT_TX	CHAR	40
Electronic Date Interchange Clearinghouse Indicator Code	EDI_CIND_CD		
Health Insurance Carrier EDI Clearinghouse Indicator Comment Text	HIC_EDI_CIND_CMT_TX	CHAR	40
Electronic Date Interchange Interactive Indicator Code	EDI_IIND_CD		
Health Insurance Carrier EDI Batch Interactive Comment Text	HIC_EDI_IIND_CMT_TX	CHAR	40

8.3. Map of Target Fields from Source Fields

The SIT Input file will be in the same format as that of the SIT Load file. As such, no mapping of target to source fields is required.

8.4. DEERS 3.0 New Medical High Level Data Model



8.5. Data Migration Data Elements

Heath Insurance Carrier Deactivation Calendar Date

Definition: The date that the health insurance carrier was deactivated as an active carrier.

Display Length: 8

Valid Values

CCYYMMDD Date

Entity List

Other Health Insurance Input File – HIC_DAC_DT Other Health Insurance Load File – HIC_DAC_DT

Health Insurance Carrier Fax Number Code

Definition: The code that represents the fax number of the health insurance carrier.

Display Length: 14

Entity List

Other Health Insurance Input File – HIC_FAX_CD Other Health Insurance Load File – HIC_FAX_CD

Valid Values

Numeric

Health Insurance Carrier Mailing Address City Name

Definition: The name of the city of the mailing address of the health insurance carrier company.

Display Length: 20

Valid Values

Text

Entity List

Other Health Insurance Input File – HIC_MA_CTY_NM Other Health Insurance Load File – HIC_MA_CTY_NM

Health Insurance Carrier Mailing Address Line 1 Text

Definition: The first line of the mailing address of the health insurance carrier company.

Display Length: 40

Valid Values

Text

Entity List

Other Health Insurance Input File – HIC_MA_LN1_TX Other Health Insurance Load File – HIC_MA_LN1_TX

Health Insurance Carrier Mailing Address Line 2 Text

Definition: The second line of the mailing address of the health insurance carrier company.

Display Length: 40

Valid Values

Text

Entity List

Other Health Insurance Input File – HIC_MA_LN2_TX Other Health Insurance Load File – HIC MA LN2 TX

Health Insurance Carrier Mailing Address Postal Region ZIP Code

Definition: The postal region ZIP code of the mailing address of the health insurance carrier company.

Display Length: 5

Valid Values

Alphanumeric

Entity List

Other Health Insurance Input File – HIC_MA_PR_ZIP_CD Other Health Insurance Load File – HIC_MA_PR_ZIP_CD

Health Insurance Carrier Mailing Address Postal Region ZIP Extension Code

Definition: The postal region ZIP extension code of the mailing address of the health insurance carrier company.

Display Length: 4

Valid Values

Alphanumeric

Entity List

Other Health Insurance Input File – HIC_MA_PR_ZIPX_CD Other Health Insurance Load File – HIC_MA_PR_ZIPX_CD

Health Insurance Carrier Mailing Address State Code

Definition: The code that represents the state of the mailing address of the health insurance carrier company.

Display Length: 2

Valid Values

Alphanumeric

Entity List

Other Health Insurance Input File – HIC_MA_ST_CD Other Health Insurance Load File – HIC_MA_ST_CD

Health Insurance Carrier Name

Definition: The name of the health insurance carrier company.

Display Length: 40

Valid Values

Alphanumeric

Entity List

Other Health Insurance Input File – HIC_NM Other Health Insurance Load File – HIC_NM

Health Insurance Carrier Qualifier Text

Definition: Additional textual information to distinguish the specific policy or coverage aspects of a health insurance carrier.

Display Length: 50

Valid Values

Text

Entity List

Other Health Insurance Input File – HIC_QUAL_TX Other Health Insurance Load File – HIC_QUAL_TX

Health Insurance Carrier Standard Comment Text

Definition: Specific comments to identify administrative aspects of a health insurance carrier.

Display Length: 60

Valid Values

Text

Entity List

Other Health Insurance Input File – HIC_STD_CMT_TX Other Health Insurance Load File – HIC_STD_CMT_TX

Health Insurance Carrier Telephone Number Code

Definition: The code representing the telephone number of the health insurance carrier company.

Display Length: 14

Valid Values Alphanumeric

Entity List

Other Health Insurance Input File – HIC_TNUM_CD Other Health Insurance Load File – HIC_TNUM_CD

Health Insurance Carrier Identifier

Definition: The identifier that represents the carrier (e.g., Aetna or Blue Shield) in the Standard Insurance Table (health insurance).

Display Length: 9

Valid Values

Text

Entity List

Other Health Insurance Input File – HIC_ID Other Health Insurance Load File – HIC_ID

Health Insurance Carrier Verification Calendar Date/Time

Definition: The date and time that the health insurance carrier was verified.

Display Length: 14

Valid Values

CCYYMMDDHHMMSS Date and Time

Entity List

Other Health Insurance Input File – HIC_VER_STAT_DT Other Health Insurance Load File – HIC_VER_STAT_DT

Health Insurance Carrier Verification Status Code

Definition: The code that indicates the status of the verification of the health insurance carrier.

Display Length: 1

Valid Values

N No longer usedP PlaceholderU UnverifiedV Verified

Entity List

Other Health Insurance Input File – HIC_VER_STAT_CD Other Health Insurance Load File – HIC_VER_STAT_CD